DOCUMENT RESUME

ED 419 979 CE 076 684

AUTHOR	Shaw, Simon
TITLE	Development of Core Skills Training in the Partner Countries. Subgroup D. Final Report.
INSTITUTION	European Training Foundation, Turin (Italy).
PUB DATE	1998-06-00
NOTE	64p.; For the 1998 reports of ETF Advisory Forum Subgroups A-D, see CE 076 681-683.
PUB TYPE	Reports - Research (143)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Basic Skills; *Educational Development; *Entrepreneurship; Evaluation Methods; Foreign Countries; Integrated Curriculum; *Job Skills; *Job Training; Postsecondary Education; Secondary Education; Student Evaluation; Teaching Methods; *Vocational Education
IDENTIFIERS	Slovakia

ABSTRACT

This report examines development of core skills training, including entrepreneurial and management skills. Section 1 identifies issues that focus the study: core skill priorities, mapping core skills in the vocational education and training (VET) systems in partner countries, delivery of core skills, and good practice in delivering core skills. Section 2 describes how core skills are defined, specifies categories used for the survey, and summarizes outcomes of recent research defining the different concepts of core skills in European Union countries. Section 3 presents a broad picture of how core skills are regarded by the partner countries and how the different sets of core skills fit into their education and training systems. Responses to a questionnaire completed by 12 delegates in 9 countries indicate that all three skill sets--key, management, and employment--were relevant, and key skills were most important. The responses are presented to questions regarding relative importance of specific core skills, teaching methods, assessment methods, and responsibility for core skills. Section 4 gives examples of developments in core skills training in nine partner states. Section 5 provides suggestions for integrating core skills quickly and effectively. Chapter 6 interprets findings using the four criteria of a framework developed to provide a basis for integrating national debates on key qualifications in Europe. Appendixes include the questionnaire and examples of developments in the United Kingdom and Germany. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ETF-AF98-010

European Training Foundation

ED 419 979

Subgroup D

FINAL REPORT

DEVELOPMENT OF CORE SKILLS TRAINING IN THE PARTNER COUNTRIES

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

June 1998

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
J Anstey
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Prepared by Simon Shaw
(With contributions on EU countries from Pekka Kämäräinen)

CE074 684

TABLE OF CONTENTS

Page

1. Introduction 5

1.1. Context of the study 5
1.2. Focus of the study 5
1.3. Methodology 7

2. Defining core skills 9

2.1. Core skills categories 9
2.2. Skills commonly listed in each category 10
2.3. Definitions for this study 14
2.4. Defining core skills in the partner countries 16
2.5. Defining core skills in EU countries 18

3. Mapping core skills in the partner countries 20

3.1. Relevance of core skills to respondents 20
3.2. The place of core skills in the partner countries 20
3.3. The relative importance of core skills sets 22
3.4. The relative importance of specific core skills 22
3.5. Teaching methods 24
3.6. Assessment methods 25
3.7. Responsibility for core skills in the partner countries 27

4. Developments in core skills training 29

4.1. Examples of developments in the partner countries 29
4.2. Developments in EU countries 33

5. Integrating core skills 34

5.1. A basis for integration 34
5.2. Constructing a core skills dimension in education and training 36
5.3. Some unanswered questions 37

6. Conclusions 38

6.1. Frames of reference 38

6.2. Impact on changes in VET 39

6.3. Instruments for curriculum development 39

6.4. Implications for lifelong learning 40

Annex 1 - Questionnaire 41

Annex 2 - Examples of developments in EU countries 60

1. INTRODUCTION

1.1. Context of the study

In 1997, Subgroup D of the European Training Foundation's Advisory Forum identified as a theme for further investigation the development of core skills training, including entrepreneurial and management skills. This theme emerged from work carried out by the subgroup in previous years on strategies for continuing training, roles and responsibilities in continuing training and training for enterprise: one of the key recommendations in the report of the subgroup's work in 1997 was further study of 'programmes to develop the core entrepreneurial personal skills'[1]. The Advisory Forum's proposals for this further study noted that a market economy requires people to develop 'key competencies' in addition to occupationally specific skills. These key competencies include teamwork, planning, problem-solving, communication skills, information technology skills, the ability to cope with uncertainty, creativity, foreign languages, leadership, entrepreneurial behaviour, management skill and organisational understanding. The subgroup also noted that the development of entrepreneurial behaviour is a particular priority for many of the partner countries as they seek to reinforce their base of small firms. It also recognised that the development of core skills within the member states of the European Union (EU) provides a rich source of best practice and advanced thinking.

1.2. Focus of the study

To address these issues, the subgroup agreed that this study should have four main aims:

1. To identify the degree to which core skills are seen as a priority for education and training in the partner countries, and how these priorities are weighted.
2. To 'map' how core skills fit into the vocational education and training (VET) systems in each partner country.
3. To find out how they are being delivered in the partner countries.
4. To discover examples of good practice in delivering them, both in the partner countries and in the EU.

---

[1] Gibb, A. (1997): Key Issues in the Development of Entrepreneurship and Small Business Training: the potential for action. Torino: ETF

1.2.1. Core skill priorities

The aim was to discover what importance is attached to different categories of core skills, so that their relative weight can be assessed within each partner country and between the different countries. Key questions included:

* What policies are there in relation to core skills?
* Which categories of core skills are seen as critical, and why?
* Within each category, what weight is given to the specific skills which make up the 'skill sets'?

1.2.2. Mapping core skills in VET systems

The aim was to investigate how core skills fit into the institutional structure of VET within each country, at two levels: government departments and agencies, and types of institution. Key questions included:

* Which government departments or agencies are responsible for establishing and implementing policies for core skills?
* What programmes and schemes exist to support the development of these skills, or which specifically incorporate them, and how are they funded?
* Which institutions are responsible for delivering core skills?

1.2.3. Delivery of core skills

The aim was to find out how the institutions charged with responsibility for implementing policies in core skills actually set about delivering them. Key questions included:

* What curricula do they follow?
* What materials are used?
* How are teachers and trainers trained to deliver the core skills?
* What arrangements are there for monitoring and evaluating the quality of delivery?

1.2.4. Good practice in delivering core skills

The aim was to identify examples of good practice in delivering core skills and to describe approaches and models that may be of wider value. Key questions included:

* Where does the best practice occur?
* What is it, and specifically what is good about it?
* What is the context?
* Why does it work in this context, and could it be transferred to other contexts?

1.3. Methodology

Because of the need to define the broad term 'core skills' more precisely for the study, a preliminary analysis was undertaken which separated core skills into a number of categories (see section 2.1 below). Four of the categories were selected as a basis for the study because of their relevance to the subgroup's concern with employment-related skills (see section 2.3). A questionnaire was developed to gain information relating to the four aims listed above, and sent to 36 individuals in 23 partner countries. Responses were received from 12 individuals, representing nine countries. The findings are analysed in section 3 and the questionnaire is reproduced as Annex 1 to this report. After the questionnaires had been received, and a preliminary analysis of the findings had been made, a workshop was held in Vilnius to generate more detailed, in-depth information for the study. The workshop was attended by Advisory Forum representatives from eight partner countries and three EU countries.

The main inputs to the workshop were made by members of the Advisory Forum themselves. The workshop was organised so that members could contribute their knowledge of core skills training both at a policy and systems level and at an institutional and programme level. Discussions were not confined simply to presentations of what is happening with core skills in each country, important though this is. Equally important were the opportunities opened up by the workshop to develop comparative understanding of core skills developments.

This comparative understanding showed similarities and differences across the partner countries, and between the partner countries and member states. To achieve some understanding at these two levels, the workshop attempted to:

- Identify linkages between systems and micro-level practice in the different countries;
- Discuss contradictory findings, and reach an understanding of how and why the contradictions exist;
- Identify conceptual deficits – i.e., areas where understanding is too weak or insufficient to provide a clear, convincing description;
- Outline new frameworks and methodologies for 'bridging' gaps between systems and practice;
- Suggest how 'packages' of strategies might be developed over time to meet the similar and divergent needs of the partner countries[2].

---

2 This list of objectives is adapted from and unpublished paper by Kämäräinen, P. (1998): What kind of co-operation arrangements can provide European 'laboratories' for curricular innovations in promoting 'key qualifications'. Thessaloniki: CEDEFOP.

As well as gathering information and providing opportunities for discussion as described above, the workshop also aimed to reach provisional answers to two questions:

- What do the partner countries need to do, in order to encourage and support continued development in core skills training?
- What are the possibilities and limitations for such developments, on a systemic and a micro level?

The responses given to these two questions will help to indicate what responsibilities partner countries may wish to take for the development of core skills training in the future. The methodology used in the study was intended to build up a level of understanding so that local and national practitioners and professional policy makers can make their own choices about the options to be pursued[3]. This report is structured to enable such choices to be made on the basis of information about good practice in individual cases and the appropriateness of each case to the unique character of the VET system in each country. The report will also help to focus the suggestions made by the European Training Foundation in relation to future support for core skills developments in the partner countries.

---

[3] FACET BV (1997) Developing an Institutional Capacity for SME Support. Utrecht: FACET BV

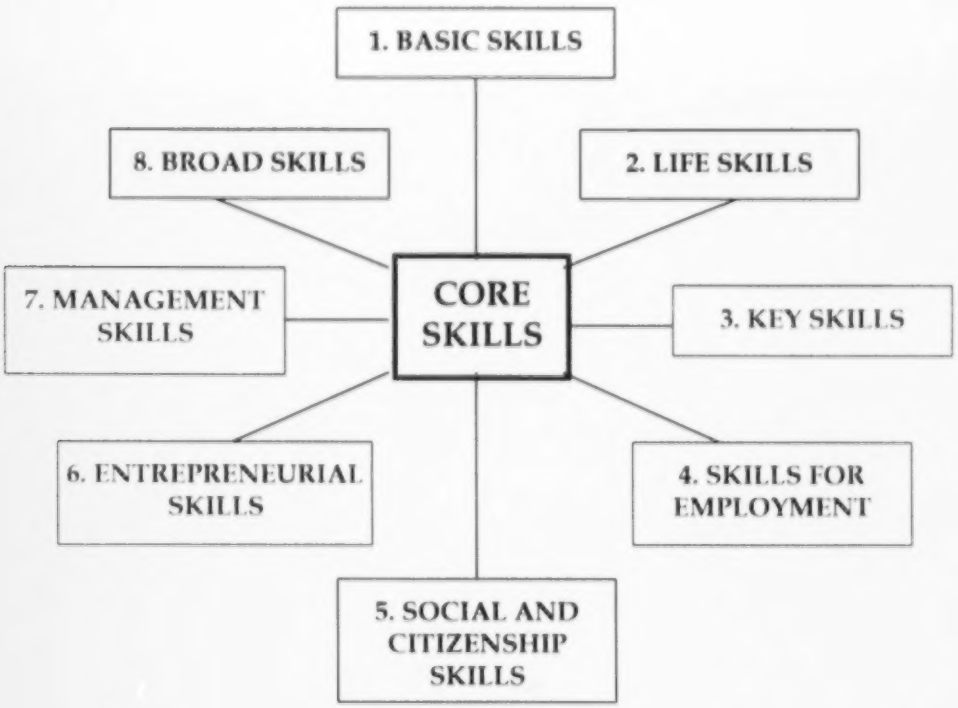
2. DEFINING CORE SKILLS

This section starts by describing how core skills are defined and specifies the categories used for this survey. It then suggests why the boundaries between skill sets should be seen as flexible and rigid and demonstrates how a relatively elastic definition of core skills is more useful than inflexible categories, particularly if these skills are to be successfully incorporated in the rapidly developing vocational education and training systems in the partner countries. Finally, it summarises the outcomes of recent research defining the different concepts of core skills in EU countries.

2.1. Core skills categories

There is no single definition of core skills. Descriptions of core skills developed in the last fifteen to twenty years fall into eight main categories. Each category lists a different set of skills; although they sometimes overlap, the precise meaning given is different in each category. Figure 1 shows the eight categories. The skills commonly listed in each one are listed below.

Figure 1: Categories for defining core skills



2.2. Skills commonly listed in each category[4]

2.2.1. Basic skills[5]

- Literacy;
- Numeracy.

These are sometimes known as the 'gateway' skills. They give people the ability to write, read, speak and use numbers at a level necessary to function and progress at work and in society.

2.2.2. Life skills[6]

- Skills to manage oneself and grow;
- Relating to one other person;
- Relating to other people;
- Skills for specific situations: education, work, home, leisure, community.

These are the skills which enable people to live a full social life and to contribute to the community.

2.2.3. Key skills[7]

- Communication;
- Application of number;
- Information technology;
- Improving own learning and performance;
- Problem solving;
- Working with others.

These are the skills which help people to develop effective performance across a wide range of settings, mainly at work but also socially and in the community. They also develop skills of learning.

---

4 The lists of skills in this table are intended to be indicative, not definitive; they give a clear indication of the eight categories but are not complete. Sources for the lists are provided in the footnotes.

5 DfEE (1996): *Basic Skills for Life*. Sheffield: DfEE

6 Hopson, B. and Scally, M. (1981) *Lifeskills Teaching*. London: McGraw-Hill

7 NCVQ (1996) *Core Skills*. London: NCVQ

2.2.4. Social and citizenship skills[8]

- Being socially active;
- Communication;
- Co-operation: working with others;
- The nature of community;
- Roles and relationships in a democratic society;
- Duties, responsibilities and rights;
- Moral codes and values;
- Principles of representative democracy;
- Rule of law;
- Social justice;
- Human rights.

These are the skills which help people live together and participate usefully in the social and economic life of a state and/or group of states such as the European Union.

2.2.5. Skills for employment[9]

- Communication;
- Information processing;
- Adaptability;
- Independent decision-making;
- Rights and duties as citizen and consumer;
- Learning and self development;
- Languages;
- Initiative and creativity;
- Critical ability (reasoning);
- Work process management;

---

8 Mursak, J. (1997) 'The relevance of key qualifications in the transition process.' . In: European Training Foundation, *Qualification challenges in the partner countries and Member States*. Turin: ETF. / NCC (1990) *Education for Citizenship*. Curriculum Guidance 8. York / NCC. Starkey, H. (1995) 'From Rhetoric to Reality: Starting to Implement Education for European Values'. In: Bell, G. (ed.) *Educating European Citizens*. London: David Fulton.

9 Piotrowski, M. and Bednarczyk, H. (1997) 'Against over-specialisation and in favour of flexibility: the 'correct' design of occupational profiles. In: European Training Foundation, *Qualification challenges in the partner countries and Member States*. Turin: ETF. / Anderson, A. and Marshall, V. (1996) *Core versus occupation-specific skills*. London: DfEE. / Buck, B. 'Problem solving: how to manage uncertainty'. In: European Training Foundation, *Qualification challenges in the partner countries and Member States*. Turin: ETF. / Hendrikse, A. (1997) 'The (re)integration of work and learning'. In: European Training Foundation, *Qualification challenges in the partner countries and Member States*. Turin: ETF.

- Problem solving;
- Self-confidence in uncertainty;
- Thinking and doing.

These are the skills most often sought by employers. They provide access to employment and help people develop competence and their careers.

2.2.6. Entrepreneurial skills[10]

- Communication;
- Dealing with uncertainty;
- Ethical competence;
- Generating and researching a business idea;
- Information processing;
- Investing personal and family assets;
- Learning;
- Making mistakes and recovering from them;
- Managing transactional and regulatory relationships;
- Numeracy;
- Operating independently;
- Problem solving;
- Taking action;
- Taking opportunities;
- Using limited resources;
- Using personal relationships and social networks;
- Working with others.

These are the skills which help people look for opportunities to start their own businesses and improve the performance of businesses.

2.2.7. Management skills[11]

- Analytical thinking;
- Building teams;
- Coaching and mentoring;
- Communication;
- Counselling;

---

[10] Nelson, E. (1997) 'The Vocational Education and Training system and qualification needs of small and medium-sized enterprises'. In: European Training Foundation, *Qualification challenges in the partner countries and Member States*. Turin: ETF.

[11] Flexible Management Learning Centre (1996) *Gateway to Management Skills* and *Gateway to Leadership Competencies*. Newcastle: Northumbria University

* Creativity;
* Decision making;
* Delegation;
* Focus on achievement;
* Influencing others;
* Information search and gathering;
* Judgement;
* Leading;
* Learning;
* Managing change;
* Managing stress;
* Motivation;
* Negotiation and persuasion;
* Problem solving;
* Self-confidence;
* Strategic perspective;
* Working with others.

These are the skills which people use to manage themselves and others, mainly but not exclusively at work.

2.2.8. 'Broad' skills[12]

* Analyse;
* Monitor;
* Plan;
* Diagnose;
* Synthesise.

These are the 'higher order' skills which people apply to a variety of contexts, in each of which they already have occupational or subject-specific knowledge and skills. They enable people to understand and manage complex or sensitive situations.

---

12 Wolf, A. and Silver, R. (1995) *Measuring 'broad' skills: the prediction of skill retention and transfer over time.* Sheffield: DfEE.

2.3. Definitions for this study

These eight sets of skills are relevant to life in general and to working life (employment) in particular. It is possible to express them along a continuum, as shown in Figure 2.

Figure 2: Continuum of core skills

This study focuses on the core skills most closely related to employment, in relation to three time dimensions:

- Immediate – to address the twin problems of a high failure rate in business and high rates of unemployment in the partner countries, and to provide viable alternatives to unemployment.
- Intermediate – to encourage adults and young people to gain the skills needed for working in a market economy, including the skills to change careers and start their own businesses; this should be seen as a contribution to improving the flexibility of labour markets.
- Long term – to build an entrepreneurial and market-aware spirit in society, particularly among young people.

Four of the eight skills along this continuum are most relevant to these dimensions. They are:

- Key skills;
- Skills for employment;
- Entrepreneurial skills;
- Management skills.

Table 1 shows the extent of overlap between the skills in these four categories. Equivalent terms, where they occur, are shown in brackets.

Table 1: Overlap between skills in the four most relevant categories

Skill	Key skills	Skills for employment	Entrepreneurial skills	Management skills
Communication	✔	✔	✔	✔
Application of number (numeracy)	✔		✔	
Information technology (information processing)	✔	✔	✔	✔
Working with others	✔	✔	✔	✔
Problem-solving	✔	✔	✔	✔
Improving own learning and performance (self-development)	✔	✔	✔	✔
Adaptability (flexibility; taking opportunities)		✔	✔	
Independent decision-making (initiative)		✔	✔	✔
Rights and duties as a citizen and consumer		✔		
Foreign languages		✔		
Creativity		✔		✔
Critical ability (reasoning; analytical thinking)		✔		✔
Self-confidence in uncertainty		✔	✔	✔
Action and reflection (doing and thinking)		✔	✔	✔
Ethical competence			✔	
Leading				✔
Motivation			✔	✔
Focus on achievement			✔	✔
Influencing others (using relationships and networks)			✔	✔
Judgement				✔
Strategic perspective				✔

Analysis of this overlap reveals three significant points:

- Key skills are common to all categories;
- Skills for employment are broader than key skills;
- There is a great deal of overlap between core management and entrepreneurial skills - for the purposes of this study, they are therefore included together in one single category.

2.4. Defining core skills in the partner countries

The essence of core skills is their breadth. They are broad concepts in education and training, and they link to even broader concepts for individuals, such as gaining occupational skills and lifelong learning; and in society as a whole, such as eliminating poverty, making the transition to a competitive market economy and achieving a stable social structure.

This is a period of rapid transitions in Central and Eastern Europe and the newly independent states. Basic concepts of education and the economy are changing. Potentially, core skills have great importance in this transition. They help people gain the skills for employment, both in educational routes (from initial vocational training through to university level education), and in re-training as part of employment. They also provide a way of linking the education and training curriculum more closely to economic and market needs.

2.4.1. The need for elasticity

It is clear from the study that partner countries will benefit most from the concept of core skills if the boundaries between categories are seen as elastic, rather than fixed or rigid.

There are two main reasons for this. First, there is considerable overlap between the three skill sets, which means that it should be possible to move specific skills freely between the different categories. For example, in a small country which relies heavily for its economic future on links with neighbouring countries, foreign languages may be seen as a key skill as well as a valuable skill for improving an individual's employment potential. Second, there are bound to be significant differences in the weight given to certain skills, depending on viewpoint. For example, a viewpoint which focuses on information and technology as crucial enabling factors in the economy will lead to a different emphasis from a viewpoint focused on the development of partnership networks between small and medium sized companies. Any useful definition of 'core' needs to take this variability into account.

However, it should be recognised that despite the advantages of elasticity between categories in allowing multiple definitions of core skills, the total list of skills is relatively stable. When asked what skills they would add to each of the

three categories included in this study, respondents frequently re-named skills or moved skills between categories, but only added new skills very infrequently.

The need for elasticity can be met by taking a 'poly-modular' approach to core skills, enabling different countries to make their own definitions and to adapt and renew them in response to regional and local needs and priorities. For example, it is well understood in the partner countries that there is a pressing economic need to facilitate rapid flows of information and increases in knowledge. Literacy, numeracy and information technology skills may not be enough to develop this capability. Foreign languages may also be crucial because much of the most valuable information is only available in languages such as English.

There is also another sense in which the core skills concept must be seen as elastic. A linear analysis of core skills suggests that at lower levels of attainment, the concept of a 'core' is very solid: most definitions of basic literacy, numeracy, information technology skills and so on have a great deal in common. At higher levels of attainment, they become more differentiated and specialised. For example, it is possible to define a core of numeracy skills for all, but a definition of the numeracy skills required for structural engineers will differ significantly from a similar definition for doctors.

To address this issue of differentiation, a multi-dimensional analysis of core skills is necessary, so that any definition adopted is capable of reflecting the balance and mix of skills which people need at various stages of their life. The analysis should take into account not only which mix of skills people develop, but at what levels they are needed.

2.4.2. Impact on education and training

Policy and delivery should both be responsive to the need for elasticity. A simple matrix model which combines goals, definitions and teaching and learning methods will provide a starting point for ensuring that core skills education and training meets the needs of the economy and society (see Figure 3).

Figure 3: Matrix model for defining core skills

Goal 1		
Objectives	Core skill sets: definition 1	Appropriate teaching and learning methods
Goal 2		
Objectives	Core skill sets: definition 2	Appropriate teaching and learning methods

Using this model, it should be possible to create definitions of core skills that unite responsiveness to market needs with appropriate, learner-centred teaching and learning methods. Market needs and individual requirements are the primary factors which should define a core skills curriculum; standards, qualifications and delivery guidelines may be embodies in national and local agreements, but they should only be developed in response to the primary factors.

2.5. Defining core skills in EU countries

In the previous sections of the report, three sets of core skills were identified as a priority for the development of vocational education and training (VET) systems in the partner countries. The question was then asked; how can these skills be integrated in the curricula for VET or continuing vocational training (CVT)?

This approach does not make any particular assumptions about how to relate core skills to broader skill needs and does not make specific suggestions on the role of VET in promoting these skills. In particular, it does not make transparent how different traditions of curriculum development can help to integrate core skills in vocational curricula. This is appropriate for a discussion that tries to link core skills to the transformation of vocational education and training in the partner countries. However, when comparative evidence is sought from the EU countries, it is necessary to describe national approaches which can be traced to different socio-cultural contexts of VET in member states and to their different patterns of curriculum development.

This section introduces an interpretative framework to make transparent some national debates on core skills or 'key qualifications' (a more inclusive concept) in EU countries.

2.5.1. Debates on key skills

The basic concept in the UK-based debates on key skills is that of a particular set of skills, which are assumed to provide a support structure for more content-specific learning. The main thrust is to enhance the skills of individual learners and to enrich the relatively narrow definition of vocational learning contained in national vocational qualifications (NVQs). Key skills aim to transcend particular vocational contexts. In the context of curriculum development, key skills are related to specific modules or units which complement other elements of the curricula such as job-specific skills. These modules or units are to be assessed as essential components of the learning outcomes. From the perspective of lifelong learning, key skills are seen as a way of improving the prospects for individuals to gain broad competence and enhance their position in the labour market.

2.5.2. Debates on key/core competencies

The more diversified set of approaches and debates aggregated under the notion of key or core competencies can be seen as a 'middle ground' between two poles. They refer to a set of competencies that transcend traditional divisions of labour and traditional occupational profiles. Very often these competencies are referred to via negative definitions, such as 'extra-functional' or 'process-independent' competencies; or by indicating a broader range of utilisation through such terms as 'broadly applicable competencies', or 'transversal competencies'. In these debates, skills and the enhancement of individual learning processes are primarily related to the needs for organisational learning (i.e. group- or system-related working, learning and participation) within new concepts of production. Thus, the enhancement of individual learners' competence is related to the need

to promote an organisational learning culture and to improve collective work performance and collective mastery of production processes.

From the perspective of curriculum development the main thrust of such debates is in learning designs that promote people's ability to relate individual competencies to the respective organisational context and to contribute to the development and improvement of work performance. From the perspective of lifelong learning the debates emphasise people's ability to maintain a culture of organisational learning and to respond and contribute to constant changes in working life by developing their organisations.

2.5.3. Debates on key qualifications

The third set of debates can be conceived as a variant of the second. However, in the (mostly German) debates on key qualifications there are additional features that require separate attention. The concept of key qualifications was initially launched in the 1970s by a future-oriented vision that challenged radically the established structures of vocational qualifications and related patterns of vocational training. Later, the concept was reinterpreted and related to approaches that promote the modernisation of vocational qualifications. Essentially the concept has three forms:

* An extension of individual vocational learning (in line with the UK concept of key skills);
* A set of qualification-goals concerning self-organised action within organisational learning cycles (self-organised information retrieving, self-organised planning, self-organised task-implementation, self-organised quality assessment);
* A concept of integrated occupational competence (integriertes Handlungskompetenz) which refers to an integrity of specialised knowledge-basis (Fachkompetenz), social and participative competence (Sozialkompetenz) and methodological mastery of new challenges in changing work situations (Methodenkompetenz).

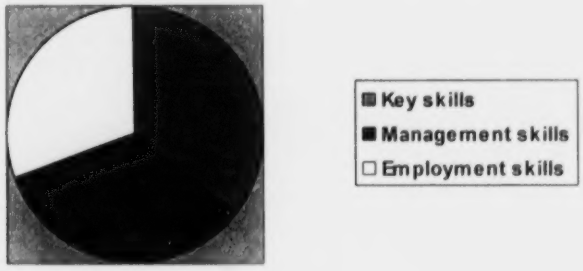
From the perspective of curriculum development the first form of the concept listed above pays particular attention to assessment. The third form has led to piloting with learning designs that integrate diverse elements of the curriculum to a 'whole curriculum approach'. The second form has related the first two together through common quality criteria that are to be promoted both within curriculum development and assessment patterns. This is promoting new linkages both on the level of qualification frameworks and on the level of delivery. The perspective for lifelong learning is related to individual skills development, organisational learning and debates on career progression models and on the degree to which the new curricula can contribute to an 'upgrading' of VET.

3. MAPPING CORE SKILLS IN THE PARTNER COUNTRIES

This section presents a broad picture of how core skills are regarded by the partner countries, and how the different sets of core skills fit in to their education and training systems. It is based on responses to a questionnaire, sent to 36 delegates in 23 partner countries. Twelve completed questionnaires were received from nine countries, a response rate of approximately one third.

3.1. Relevance of core skills to respondents

Respondents to the survey were asked which of the core skill sets was most relevant to their organisations.

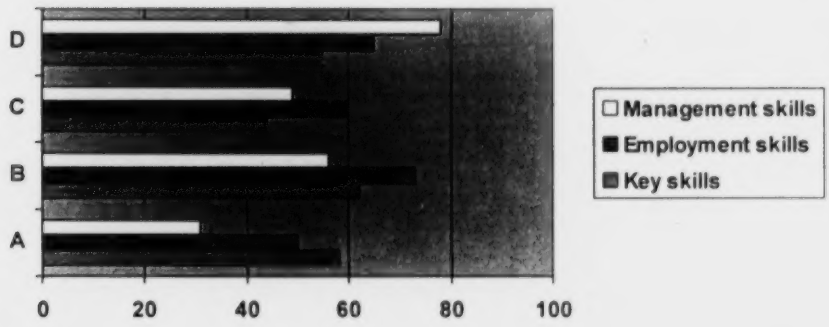


Their responses showed that all three skill sets are relevant, within a narrow range of only 10%. Key skills are the most relevant, followed by entrepreneurial and management skills, with employment skills marginally less relevant.

3.2. The place of core skills in the partner countries

Respondents were asked to indicate at which stage in the education and training system each of the core skill sets was included. Four stages were given:

- A - Secondary education (i.e. school, up to the age of 16);
- B - Initial vocational education or training;
- C - Continuous training (i.e. any form of post-initial training);
- D - Business and management training.



3.2.1. Key skills

Key skills are seen as most important in secondary and initial vocational education and training, which reflects a widely-held assumption that these skills should be learned early on and area a basis for further learning. They are also seen as a legitimate part of continuous training, which suggests that remedial action may be needed for some adults to improve these skills; and as part of business and management training, which reflects an understanding that key skills are needed at a higher level for people to function effectively as managers.

3.2.2. Skills for employment

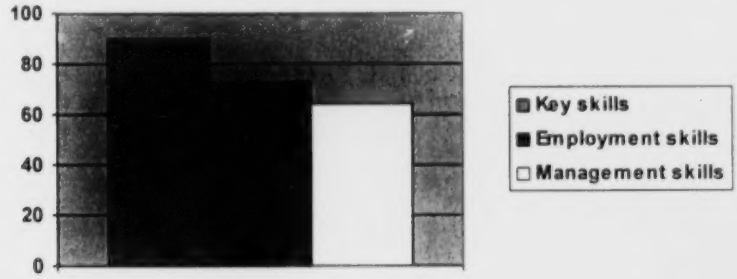
These skills are seen as crucial in initial vocational education or training and as a legitimate part of continuous training. The degree of importance given to them reflects the view that in a market economy, people need to develop employment-related skills not only to get jobs, but also to keep them and to move from one job to another as required by shifts in the labour market. Interestingly, employment skills are also seen as a legitimate part of secondary education, reflecting the need to prepare young people for work.

3.2.3. Entrepreneurial and management skills

Unsurprisingly, these are seen as most important in business and management training. There is a recognition that they could also form a useful, if not essential, part of an initial vocational education and training curriculum. They are not seen as particularly important in schools, although respondents in some of the Central and Eastern European states reported that some schools are starting to include mini-enterprise training for their pupils.

3.3. The relative importance of core skills sets

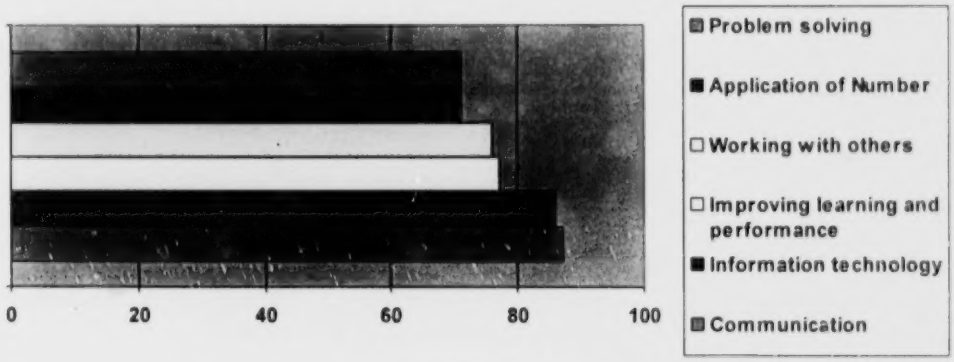
Respondents were asked to rate the importance of the three core skill sets in relation to one another.



Key skills emerged as the most important with a 90% rating. Skills for employment rated 73% and entrepreneurial and management skills rated 64%.

3.4. The relative importance of specific core skills

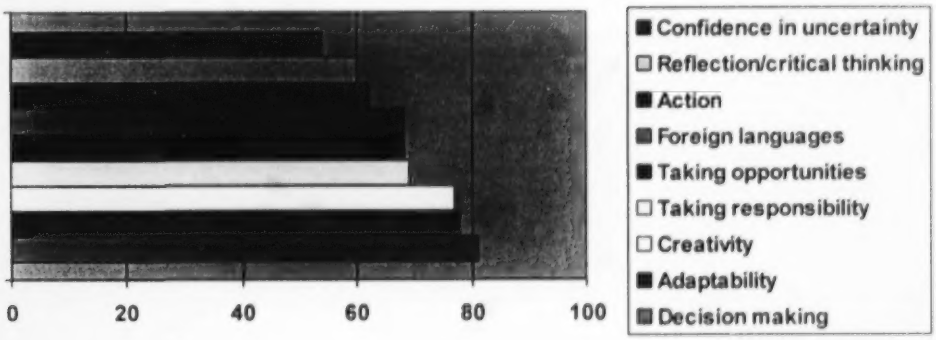
Respondents were also asked to indicate the relative importance of specific skills within each skill set.



3.4.1. Key skills

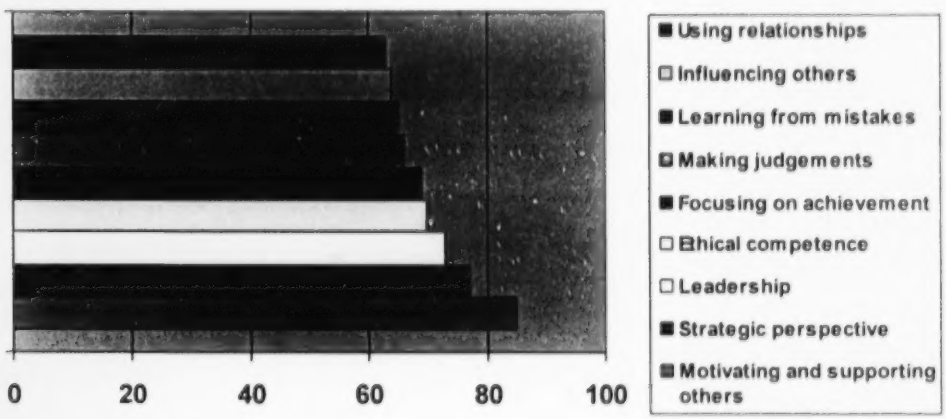
All the key skills are seen as important, within a fairly narrow range of 15%. Communication and Information technology emerged as the most important skills, followed by Improving own learning and performance and Working with others. Application of Number and Problem-solving were the two least important, but the close grouping of all six skills suggests that these two are still seen as necessary for the development of other, more specialised skills.

3.4.2. Skills for employment



These skills are graded over a relatively wide range of 27%. Decision-making, adaptability and creativity are seen as the three most important, reflecting the need for employees to be flexible and able to work on their own without constant supervision. Taking responsibility and taking opportunities are also important attributes of workers in a modern, market-led economy. Ability in foreign languages emerges strongly, suggesting both the importance of export markets and the need to learn skills and technology developed in other countries. The higher order skills of action and reflection and critical thinking, along with confidence in uncertainty, are seen as the least important attributes for employment; this may reflect a realistic perception that these skills are the hardest to develop (and are often seen as graduate-level skills).

3.4.3. Entrepreneurial and management skills

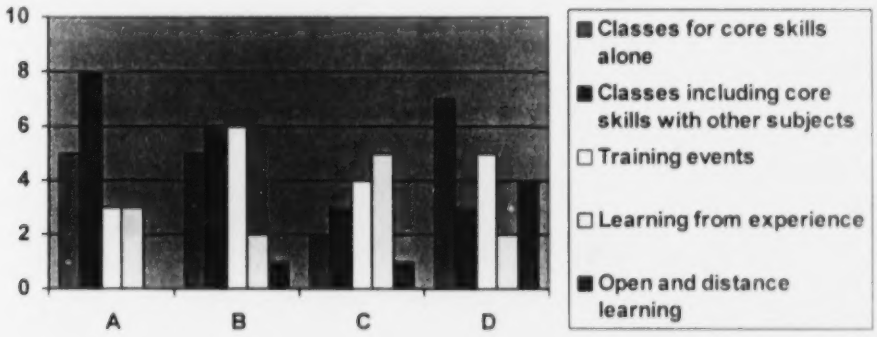


Overall, these skills fall into a range of 22%. Being able to motivate and support other people emerges as by far the most important skill in business, with a gap of 8% between it and the next. The remaining skills fall into a fairly narrow range of 14%. Leadership, which is closely related to motivation and support, is one of the top three skills along with the ability to develop a strategic perspective. Ethical

competence gains a relatively high position. The others - focusing on achievement, making judgements, learning from mistakes and influencing others - are a closely grouped set of attributes. Surprisingly, making use of relationships and networks is not valued highly. This perhaps reflects the relatively undeveloped state of the market economies in these countries and the absence of mature networks of supply and demand.

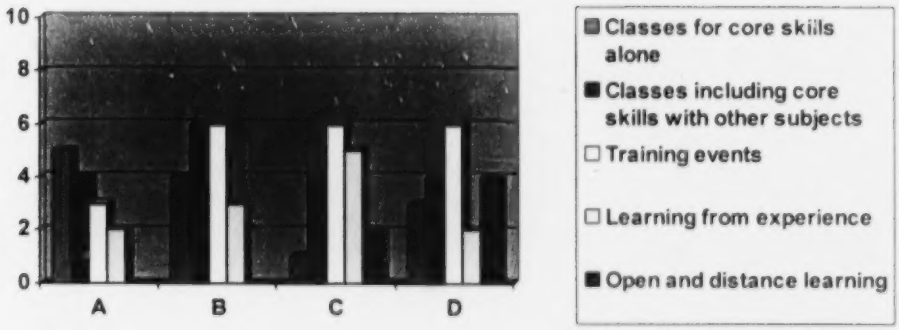
3.5. Teaching methods

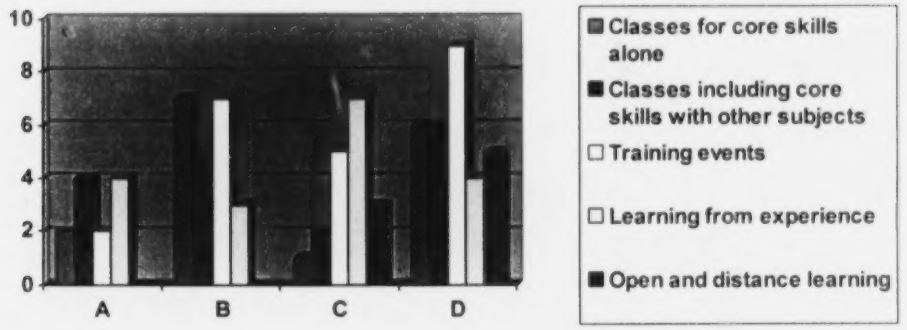
Respondents were asked to indicate which methods were most commonly used for teaching the core skills in secondary schools (A), initial vocational education and training (B), continuing training (C) and business or management training (D). Five broad options were given: classes where core skills are taught on their own; classes where they are taught in combination with other subjects; training events; learning from experience; open or distance learning.



Key skills

- *Skills for employment*





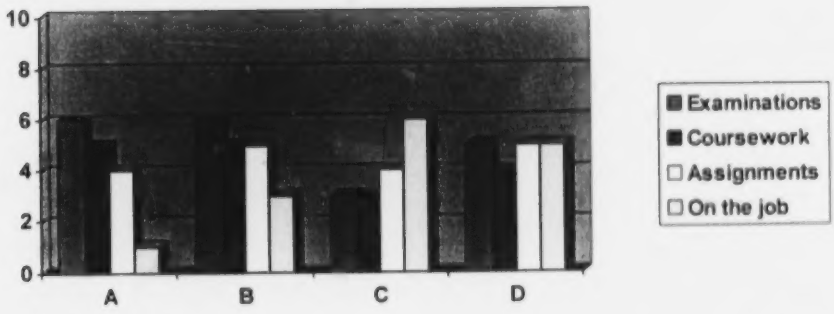
- *Entrepreneurial and management skills*

  Not surprisingly, classes are the dominant mode of teaching in secondary schools. Key skills are mostly taught in combination with other subjects rather than in classes on their own. Employment, entrepreneurial and management skills are taught in schools through a mixture of special training events and learning from experience using mini-enterprise and other simulation techniques (see Section 4.1 for examples of these). A similar picture emerges in initial vocational education and training. Although there is more emphasis on skills for employment, both these and key skills are taught using a combination of classes and training events. Learning from experience is not particularly common at this stage and open and distance learning are hardly used at all.

  In continuing training, by contrast, learning from experience is the dominant mode for all the core skills, supported in all cases by training events. Classes are relatively rare. There is some use of open and distance learning, especially for entrepreneurial and management skills. In business and management training, open and distance learning is more common, reflecting the availability of materials adapted from Western European countries and the USA. However, training events are the dominant mode at this stage, reflecting the fact that much of the training is based in business schools and universities. Classes are fairly common and there is surprisingly little emphasis on learning from experience.

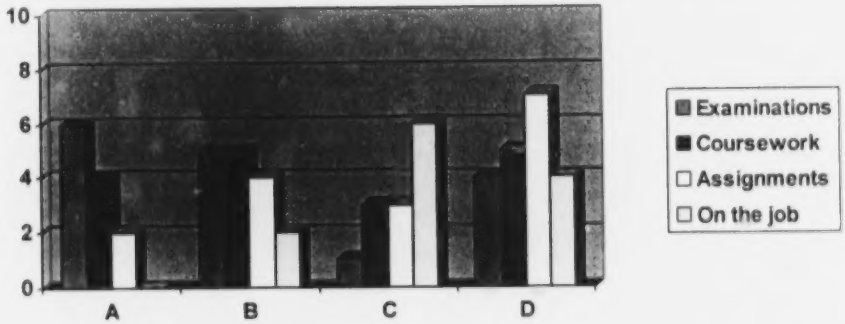
3.6. Assessment methods

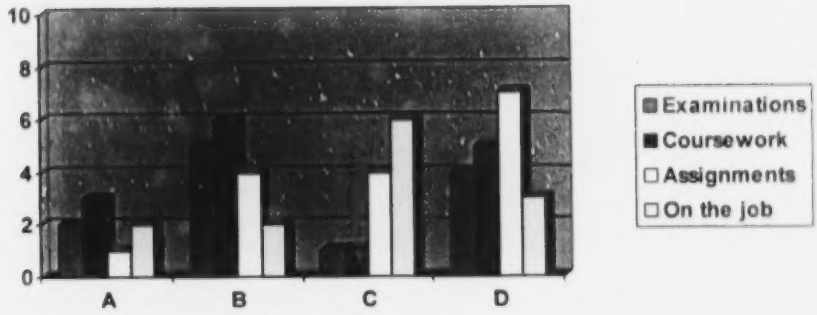
Respondents were asked to indicate which methods were most commonly used for assessing core skills at the different stages. Four broad options were given: formal written tests (examinations); course work; special assignments and projects; assessment on the job.



3.6.1. Key skills

- *Skills for employment*





- *Entrepreneurial and management skills*

  Broadly speaking, assessment methods used in partner countries parallel those used in similar situations in EU countries. In secondary schools and initial vocational education and training institutions, the dominant assessment methods are examinations and course-work, supported by assignments. In continuing training, most assessment is carried out on the job, either in 'real' job situations or special projects and assignments. There is virtually no formal written testing. In business and management training, assessment is mainly through assignments, supported by examinations and course-work and some on the job assessment.

3.7. Responsibility for core skills in the partner countries

3.7.1. Policy

Responsibility for policy is divided between education ministries and ministries of labour and social security. Among respondents, policy for key skills was universally the province of education ministries; they are either incorporated into general educational aims at secondary level or into school curricula (or both). Three countries have developed sets of standards for key skills. Skills for employment and entrepreneurial and management skills were divided between education and labour ministries in a ratio of 3:2. Employment skills are incorporated into the general educational aims in most countries, although a small number said they have no national policy for developing these skills. Only three countries had policies for developing entrepreneurial and management skills, either as part of the general educational curriculum or VET reform.

3.7.2. Delivery

Among respondents, responsibility for delivering key skills is spread between schools, vocational education and training centres, universities and companies in an approximate ratio of 3:2:1:1. Responsibility for delivering employment skills is spread between vocational education and training institutions, schools, universities and companies in an approximate ratio of 3:1:1:1. Responsibility for delivering entrepreneurial and management skills is spread between universities, companies, private business schools and secondary schools in an approximate ratio of 3:2:2:1.

3.7.3. Programmes

Programmes associated with the development of key skills include VET standards and reform (5 countries), school standards and reform (4 countries) and computerisation programmes (2 countries). Funding for these programmes is predominantly from central government, supported by Phare funds. Programmes associated with developing skills for employment include employment and retraining (6 countries), VET reform (2 countries) and foreign language courses (1 country). Funding is predominantly from central

government, supported by World Bank and Phare funds. Programmes associated with the development of entrepreneurial and management skills include small business and management training (4 countries), employment and retraining (2 countries) and Vet reform (2 countries). Funding is predominantly from central or local government, supported by World Bank, Phare and other donor agencies. Companies also contribute to these programmes in two countries.

3.7.4. Teacher training

In all but one of the nine countries in this survey, teachers are trained in key skills as part of both initial teacher training and in-service training. Study visits to other countries are also used occasionally. Teacher training in employment skills is provided in three countries as part of in-service training. Teacher training in entrepreneurial and management skills is provided in four countries, partly through in-service training and partly though specialist training provided by business schools, management institutions and companies. In the other six countries, there is no training for teachers in employment or entrepreneurial and management skills.

3.7.5. Monitoring and evaluation

Most countries in the survey monitor the adequacy of key skills teaching through one or more of these methods: general school inspections, evaluation of national standards and specific programmes, analysis of examination results and academic research into schools' performance. The adequacy of training in employment, entrepreneurial and management skills is monitored less frequently. Methods used include programme evaluation, comparison of the results of skills tests and certification of institutions.

4. DEVELOPMENTS IN CORE SKILLS TRAINING

This section gives examples of recent and current developments in core skills training in the partner countries and EU countries. The examples are necessarily selective, but they provide a snapshot of some of the most interesting and significant developments in the three categories of core skills included in this research: key skills, skills for employment and entrepreneurial and management skills.

4.1. Examples of developments in the partner countries

4.1.1. Czech Republic

In the Czech Republic, developments in all three core skill sets are relatively advanced. In many cases they are comparable to recent and current developments in EU countries, as these examples show.

- *Key skills*

  A secondary school in Sezimovo Usti in Southern Bohemia is integrating key skills into its modular programmes of technical education. At the agricultural college in Tabor, students are given projects which they solve using a combination of occupationally specific and key skills. One of the explicit aims of these projects is to develop the key skills. At a secondary school in Pardubice in Eastern Bohemia, students carry out projects in small groups, but are encouraged to work independently on their own tasks. At the hotel school in Frenstat Pod Radhosten in Northern Moravia, students carry out projects which specifically integrate key skills. These projects are conceived as complex tasks which exceed the demands normally made of students in their learning and simulate situations which they might encounter later at work. The key skills most often developed through these projects are communication, numeracy and working with others, particularly the interpersonal skills.

- *Skills for employment*

  Some secondary schools are providing a broader vocational background. For example, a school in Pardubice in East Bohemia is revising its curriculum in an attempt to enhance the flexibility and employment prospects of students, and a school in Usti Nad Labem in North Bohemia has intensive foreign language development programmes to provide wider opportunities. Schools in other regions of the Republic set up 'mini-enterprise' projects such as electrical engineering and catering, so that students develop employment skills in conditions which simulate real employment conditions.

- *Entrepreneurial and management skills*

  At a business academy in Prague, students become closely involved in a case study of three fictional firms. The aim is to develop their entrepreneurial and management skills not only though theory, but also through concrete, practical activities. A similar approach is used in secondary schools as well. A school in Sezimovo Usti provides an opportunity for students to set up and run a 'mini-enterprise' in the school, giving them an early chance to develop these skills. A school in Prague gives students a project to research the market for a product and take decisions, which are then discussed and evaluated. Students at a textile school in Usti Nad Orlici in Eastern Bohemia carry out an independent evaluation of new textile products, evaluating the labour market implications, possibilities for cost reduction and the relations between pricing and marketing.

4.1.2. Kazakhstan

Key skills have benefited from an academic research programme at Almaty Abay State University, where the Department of Education has been involved for several years in developing general study skills. These contain many of the key skills. A Gymnasium and a Lyceum in Almaty have been piloting the development of these skills in collaboration with the university for the past three years. The influence of good practice in Europe and elsewhere is felt to be both important and formative for the development of good practice in entrepreneurial and management skills. At the Almaty State Academy of Management, new programmes of study have been launched under the TACIS programme to reform business and management education throughout the country. At the School of Management in the same city, the development of modern management skills ant techniques is assisted by the European Association of Management Education.

4.1.3. Kyrgyzstan

As with most of the partner countries, there is a clear recognition in Kyrgyzstan that the general level of education in secondary schools and vocational education and training institutions has to be raised. There is also a feeling that the scale of change is overwhelming the capacity of the education and training systems to cope with it. However, there have been successful small-scale innovations, especially in aspects of core skills most directly related to the economy. For example, entrepreneurial and management skills have started to be introduced in vocational schools and are subsequently taught in more depth in 'business incubators'. This is a particularly important development because of the shift from large scale state owned enterprises to small and medium-sized businesses, and the lack of core skills (especially communication, teamwork, information handling and knowledge of the legal framework for business) in people with occupational competence.

There have also been recent structural changes in the way employment skills are taught. Following a model developed and tested in Denmark, initial and continuing training are now being provided in the same institutions, to make the best use of resources and to try and meet the complementary needs of adults, companies and young people. Training modules developed for these institutions aim to incorporate both core skills and specific sectoral skills.

4.1.4. Lithuania

Key skills are included in the curriculum of secondary schools and perceived as aspects of different subjects rather than seen consciously as key skills. This limits the extent to which they can be developed. For example, pupils are taught how to use computers at schools, but they are not taught how to use them as a tool for communication and accessing knowledge. Skills for employment are not taught, even in vocational schools. There are courses where people are taught how to look for jobs, but employment skills are not included either as separate subjects or as part of other subjects. However, programmes of vocational education are currently being reviewed and the opportunity now exists to integrate employment skills. Entrepreneurial and management skills are taught as part of other programmes, but this is not systemic at secondary or higher levels: university curricula are independent and fragmented. These skills are often not recognised or acknowledged as separate components of an integrated market-oriented curriculum.

4.1.5. Poland

In Poland, as in the Czech Republic, developments in key skills parallel similar developments in EU countries. Key skills are not restricted to secondary school students and there is currently a drive to introduce pre-vocational skills in elementary as well as secondary education. The 'Kreator' programme has developed special courses for each main subject group including maths, science, Polish language, history and information technology. Local Kreator centres in Zgiere, Cracow and Warsaw are running courses for local primary school teachers which specifically aim to help them develop key skills in primary age pupils through the subjects they study. These courses are active and up to date in their approach, and aim to respond to the expectations and needs of teachers in primary schools.

An example of how the Kreator subject-based approach works is shown in this description of a chemistry lesson in the first year of a secondary school in Warsaw. The class is divided into five groups, with three students in each group. Each group selects one experiment to carry out from a list provided by the teacher and follows this sequence of tasks:

* Formulate procedures;
* Carry out the experiment;
* Describe the reaction;
* Present the results to the other groups;
* Discuss and evaluate the experiment.

As well as developing skills and knowledge in chemistry, the lesson enables students to develop skills in communication, numeracy, problem solving and working with others.

4.1.6. Russian Federation

In the Russian Federation, isolated developments in employment training and retraining have achieved good results. For example, at the training centre of the Federal Employment Service in Smolensk, unemployed people are retrained using multimedia technologies and simulation. The outcomes are excellent, with a 95% employment rate after training. At the Moscow College of Construction, a successful joint Russian-German project for training in craft skills also includes training in running a small business, with a curriculum close to European standards.

4.1.7. Slovak Republic

Key skills are also spreading widely into the education and training system in the Slovak Republic. At the vocational school of commerce in Liptovský Mikuláš in Middle Slovakia, a modular system has been introduced for all vocational subjects. Innovative teaching and assessment methods have been developed and key skills form part of the revised curricula. Social partners are involved in preparing these curricula. The experience in this institution has formed part of recent proposals to the Ministry of Education for reforming the secondary school system. These proposals have also been developed under the PHARE VET reform programme which aims to introduce a new system and curricula throughout the country.

Employment skills are also being enhanced for people in work, in the public as well as the private sector. For example, in Bratislava, education programmes for officers in ministries, local authorities and labour exchanges include modules in management, organisation, finance and accounting. The aim of these programmes is to develop a higher level of skill, knowledge and flexibility in employees and so improve the level of management throughout the state system.

4.1.8. Tajikistan

In Tajikistan, social and political forces are pulling in opposite directions, towards and away from regulation and standardisation. These two contradictory trends impact on all stages of education and training, including core skill developments. As a result, reform is constrained by limits on the effective capacity of social and political systems to implement and absorb rapid change. For example, the education ministry is developing new policies for the whole curriculum. However, these policies are not yet implemented and the process will take many years since teachers will need to be retrained and teaching and learning strategies will need to be comprehensively revised. Leaders and innovators in education and training (as in other policy areas) tend to expect little from the state and look for their own solutions, borrowing experiences from other countries and adapting them to local needs.

Many of these small-scale, local developments include core skills. For example, some vocational schools are providing training in information technology in order to meet employers' demands for computer skills. Teachers and instructors in these schools select trainees with a reasonably high level of general capability so it is possible to integrate key information technology skills into craft training. Technical colleges and universities are modifying their curricula to incorporate the experience of Europe and the USA in training adults for employment. Teachers from Europe and the USA are taking part in courses run by these institutions and incorporating employment skills; some students from Tajikistan are also being given training places abroad. In relation to entrepreneurial and management skills, managers in large companies such as aluminium production plants are adopting the latest management methods from Japan and the Asian-Pacific economies. This is helping them to overcome conservatism and share their experience in developing entrepreneurial abilities. Small business associations are providing information to their members on work methods used in the more developed economies, including the use of computers.

4.1.9. Turkmenistan

Core skills are not yet being implemented seriously in the education and training system in Turkmenistan, but there is a recognition that teaching of core skills should start in schools so that they are easier to introduce as separate components of the curriculum at later stages. Departments in state ministries and the Academy of Science have been set up to integrate education, production and science. One of their aims is to improve vocational training in secondary schools, partly through the introduction of core skills.

4.2. Developments in EU countries

Appendix 2 presents two sets of examples on how to integrate key skills or key qualifications in the curricula of initial vocational education. For practical reasons the examples refer only to two of the three 'strands' of key qualification debates outlined in section 2.5 and are taken only from two EU countries (the United Kingdom and Germany). However, the main point of the two sets of examples is not draw attention to these two national traditions but to draw attention to different ways to mobilise resources in innovative curriculum implementation.

The first set of examples is related to developments in the United Kingdom. These examples illustrate how key skills, which were originally introduced as an additive enrichment of vocational curricula, can be developed as integral element. They are taken from an unpublished survey which was based on VET providers' own reporting on good practice. The second set of examples is related to developments in German pilot schemes (Modellversuche). They are based on the work of action research projects attached to such schemes. It is worthwhile to notice that there is a different degree of additional public investment and external support between the first examples and the latter ones. Moreover, the degree to which good practice has been documented and analysed varies considerably.

5. INTEGRATING CORE SKILLS

This section summarises the key findings of the study. It suggests that integrating core skills quickly and effectively in the partner countries could be helped by learning from the experience of EU countries, but that any learning would require careful analysis of labour market needs and of the capacities and limitations of existing education and training systems. It proposes a model for such developments. Finally, it lists several practical questions which partner countries are engaging with at the moment.

5.1. A basis for integration

The most important finding to emerge from this study is that the partner countries recognise the value of including core skills, in some shape or form, in education and training throughout the system and at all levels. For this reason, flexibility and elasticity is the key requirement both of any standards which seek to define these skills and the teaching and learning methods used to incorporate them. At the same time, it is important to recognise that there are always likely to be tensions between core skills and occupationally specific skills, and ways must be found of resolving these tensions if the two types of skills are to be properly integrated.

Many of the partner countries need help in developing curricula which integrate core skills, because they have little or no indigenous research capability in this area. But however useful the experience of others may be, the partner countries do not simply want to copy good practice: they want to create their own models based on these developments. It is necessary to take a broad view of core skills in order for every country to decide what they want to do about these skills. Once that has been done, specific help is needed to cope with the real problems of practice and implementation.

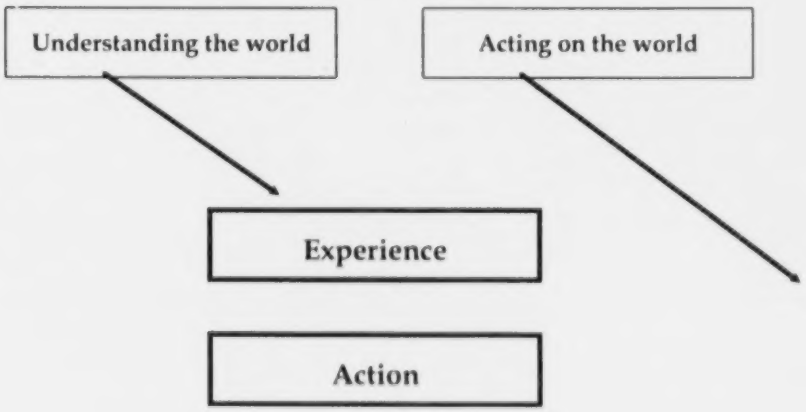
It is important therefore to emphasise another key finding of this study: that there is no single way of incorporating core skills and no 'blueprint' which defines special programmes for core skills. Whatever approach or combination of approaches is adopted has to fit the individual country's situation and traditions. However, it should be possible to define what the minimum requirements are for integration, at a sufficiently general level so that they can then be interpreted by each country and used as a starting point. For example, it might be agreed that the basis of computer literacy in modern economies is the ability to use the latest generation of software, for purpose defined by the user rather than pre-defined purposes. So the minimum requirement for the system would be the capability for people to learn the software to the point at which they can decide for themselves how to use it, rather than to teach them a set of pre-set routines.

A closely-related point also emphasised in the study, is that those responsible for making policy in core skills should be led jointly by an analysis of labour market needs and by good practice already developed in how to integrate core skills. From the labour market perspective, core skills are an important link in the growing connection between initial and continuing vocational training, and between education and training as a whole and the market needs of a society. Labour market analysis can reveal the precise need for core skills, and should form one of the bases on which curricula are developed. From the delivery perspective, good practice strongly suggests that core skills should be integrated into teaching and learning methods rather than separate subjects. For example, the occupational profiles which many of the partner countries are now developing should include core skills as an integrated part of the profiles and of the qualifications which result from profiling. At this point, it should be possible to define which core skills should be covered in initial training, and the role of continuing training in upgrading and extending them.

Action and experience

One of the main differences between core skills and occupationally specific (or subject specific) skills is that core skills are primarily to do with the application of a broad set of skills, knowledge and understanding to real life situations. Whatever the balance or 'mix' of core skills that individuals may use at any one time, they use these skills as a way of understanding the situation and acting on it. Because of this, core skills cannot be properly developed outside experience and action. A curriculum which incorporates core skills must be oriented towards both.

Figure 4: Curriculum for core skills



5.2. Constructing a core skills dimension in education and training

Introducing core skills should form part of the wider review and reform of vocational education and training now being started in the partner countries. A developmental model for adding a core skills dimension into education and training systems is likely to have several steps, as described below.

Step 1

Agree a working description of core skills. The categories proposed for this study provide a starting point. At this stage, it is important that the descriptions are elastic not rigid, allowing for local adaptation. In fact, even definitions that start out with relatively firm boundaries necessarily become elastic when they are applied to local conditions.

Step 2

Draw on an analysis of labour market needs to select the priority skills within each core skill set. Map them to the current vocational education and training system to determine what skills are already being taught, how the system as it is now could contain skills not currently taught and how the system needs to change to include them. This should include a careful consideration of how to develop clear progression routes upwards through the levels and outwards to sector or occupationally specific skills.

Step 3

Set goals and objectives for incorporating core skills into the system. This should be a partnership between those responsible for policy and those with practical experience of, and responsibility for, delivering education and training programmes. One of the key issues at this stage is to determine the degree to which core skills should be relatively diffuse or relatively concentrated within the system.

Step 4

Analyse existing policies and practices, including structural responsibilities, standards and qualifications, to determine what can be done at the level of government[13]. At this stage it is important to identify innovative practice, in particular where innovation originates and how it can be transferred beyond its point of origin.

---

[13] For an indication of the complexity of this process, as well as practical ideas for implementation, see: McDaniel, C. (1997) *The Effects of Government Policies on Higher Education.* 's-Gravenhage: VUGA.

Step 5

Analyse institutional arrangements through which policies are delivered, to see what changes need to be made at the implementation level, in teaching and learning methods, materials, teacher training and guidance. At this point it is useful to consider how to maximise learning from experience by collecting and disseminating good practice.

Step 6

Amend policies and create guidelines for implementation for each part of the VET system which has responsibilities for core skills. Develop a programme for initiating and driving through change.

5.3. Some unanswered questions

In the course of this study, several practical questions were raised which partner countries are engaging with at the moment. They included:

- How can we identify clear links between labour markets and the need for core skills?
- How should we define the minimum level of core skills that everyone requires?
- What methods are there for identifying people's needs for core skills training, in parallel with emerging definitions of occupational skills?
- Where are the most appropriate points for integrating core skills in the curriculum?
- How can we build progression in core skills from school, through initial vocational education and training, and on to continuing training?
- How can we best train teachers to integrate core skills?
- What is the right balance between sector skills and core skills in a training programme?
- What training materials are there which embody effective methods of teaching and learning core skills?

These questions provide a starting point for developments in individual partner countries and a possible focus for collaboration with EU countries.

6. CONCLUSIONS

In this concluding section, the findings of the study are interpreted using a framework developed recently to provide a basis for integrating national debates on key qualifications in Europe[14]. The framework uses four criteria to analyse the various strands that emerge in any discussion of VET systems and practices across different countries. The four criteria are:

- Frames of reference;
- Impact on changes in VET;
- Instruments for curriculum development;
- Implications for lifelong learning.

These four criteria are used to analyse the different strands emerging from this study, and to create a basis for learning from current movements in core skills in the EU member states[15].

6.1. Frames of reference

What basic concepts of core skills exist in the partner countries? Specifically, what relative weighting is given to the three categories used in this study, which of them is seen as a priority and why?

The basic concept, articulated by representatives from several of the partner countries, is a set of skills which enable individuals to develop in social and economic life and which are recognised as highly desirable in countries making the transition to a full market economy. This link between individual aspiration and economic necessity was emphasised strongly.

Key skills emerged in this study as the most important category of core skills. This is because they are seen as the basis for efficient learning as well as for effective performance both in further education and employment. In addition to the six key skills listed in the preliminary analysis (see section 2.2), foreign languages were seen as belonging to this category because they provide access to essential information and knowledge not available in the native language. The acquisition of employment-related skills rests partly on an individual's mastery of key skills, which underpin occupationally specific skills as well as core skills. Key skills also help the development of 'transfer' skills – the skills which enable individuals to use knowledge learned in one context in other, apparently unrelated, contexts – although it is important to recognise that key skills are not the same as transfer skills. In an increasingly technical

---

14 Kämäräinen, P and Streumer, J. (1998) *Curriculum development, new learning environments and transfer of innovations in Europe*. Thessaloniki: CEDEFOP.

15 This integrative analysis will be carried out by CEDEFOP in a separate but parallel study to this ETF project.

culture, core skills in information handling also contribute to the way in which people understand their world.

6.2. Impact on changes in VET

What impact do these concepts of core skills have on the changes currently being made in partner countries' VET systems? Specifically, what gains are these changes supposed to produce in terms of their desired effect on society, the economy and individuals?

VET systems in all the partner countries are undergoing a process of reform and restructuring[16]. The process has reached various stages: in some Central and Eastern European countries it is fairly well advanced and the VET systems in these countries are starting to gain the stability required to embed innovation and reform in polices, institutional structures and qualifications frameworks. One indicator that a country has reached this stage of development is the degree to which policies interlock in the different phases of education and training. At least two of the partner countries demonstrate this by a clear sense of progression in core skills through from primary school to university level courses. This corresponds closely to the concept of core skills as a binding or linking element in education and training - a concept which is currently being realised in some EU countries. However, these are exceptional cases: most partner countries do not yet have the structures to support progression in core skills, even though they understand its value.

There seems in fact to be a consensus that core skills, more or less in the categories as defined in this study, are an essential component of a modern VET system. Not only do they enable individuals to reach their potential, they also provide a rich seam of learning opportunities throughout education and training.

6.3. Instruments for curriculum development

What kind of curriculum design and delivery methods are considered as the main vehicles for core skills training? Specifically, what good practice has been developed or is emerging at the micro level of institutions and programmes?

From the perspective outlined in 6.2 above, core skills can be seen as an instrument for curriculum development in themselves, especially in education. Attached to existing educational curricula they can have a powerful transformative effect, as some of the examples in section 4 of the report show. Rather than needing a delivery vehicle, they become the means by which influences from work and the labour market are disseminated to young people. Many of the partner countries have not traditionally included a vocational component in education. Core skills are seen as a way of refocusing a traditional curriculum towards addressing vocational and labour market priorities.

---

16 See the articles in CEDEFOP's *Vocational Training: European Journal* No. 11, May-August 1997, subtitled 'Innovation and reform: training in Central and Eastern European countries'. Much of the background information for this section is derived from this publication.

Core skills are also one of the means by which innovative teaching and learning practices are imported into educational institutions. The best way – perhaps the only way – to develop skills such as problem-solving and teamwork, or to enhance people's initiative, creativity and entrepreneurial instincts, is through active, participative learning styles. Although the survey did not reveal much evidence of experiential learning, even in work-based training, it is likely that the impact of core skills will also lead to a stronger emphasis on learning by doing[17]. This is not a straightforward development: in a curriculum oriented towards action and experience, assessment and certification become considerably more problematic and challenging than in a traditional knowledge-based curriculum. However, there is some evidence of partner countries developing standards to support competence-based qualifications which integrate core skills and reflect application and experience as well as knowledge.

6.4. Implications for lifelong learning

How do the concepts of core skills training affect policies and practices in education and training? Specifically, what are the implications for secondary education, vocational education and training, training in employment (continuous training) and business and management training?

Core skills are often thought of as additions to existing curricula. This may be entirely appropriate in initial education and training: much of the good practice reported in this survey exemplifies how this is done in schools, vocational training centres and universities. But in lifelong learning, core skills may be the 'driver' for learning rather than a 'passenger' of some other learning activity. This is particularly true of skills for employment and entrepreneurial or management skills. They are seen as levers for personal growth and development and as the means of gaining access to better, more rewarding occupations. The rapid growth in management training testifies to the importance of this set of core skills as a 'threshold' in transitional and market economies.

---

[17] The relative conservatism of teaching methods and learning paradigms identified in this study is supported by recent research into the methods used to transfer know-how between EU and TACIS countries. TACIS/ETF (1996) *Evaluation of Activities in the Field of Management Training in the NIS*. Torino: ETF. For ideas on more innovative approaches, see the report of the Torino Group: ETF (1997) *Re-designing Management Development in the New Europe*. Torino: ETF.

ANNEX 1 - QUESTIONNAIRE

European Training Foundation

DEVELOPMENT OF CORE SKILLS TRAINING IN THE PARTNER COUNTRIES

Questionnaire

Please complete and return this questionnaire by 6 February

Return the completed questionnaire and documents to:

Dr Tomas Jovaiša
Director General
Lithuanian Labour Market Training Authority
Vivulskio str. 5
2009 Vilnius

Fax: +370 2 65 26 38
E-mail: tomasjov@is.lt

Your details

Your name	**Family name**	
	First name	
Your organisation		
Address of the organisation		
Telephone		
Fax		
E-mail		

1. INTRODUCTION

The questionnaire is about three sets of skills. They are all *core* skills. This means they are used in many different contexts and are not restricted to a particular job, occupation or industry sector.

1.1. Key Skills

These are the skills which help people to improve their learning and performance. They apply to a wide range of settings, mainly at work but also socially and in the community.

1.2. Skills for employment

These are the skills which employers want, and which people find useful in employment. They provide access to jobs. They also help people develop in their jobs and progress their careers.

1.3. Entrepreneurial and management skills

These are the essential skills for setting up and managing businesses. They help people find opportunities to start their own business and improve the performance of businesses. They also enable people to manage themselves and others effectively.

CORE SKILL SETS	CORE SKILLS
ENTREPRENEURIAL AND MANAGEMENT SKILLS	• Leading • Motivating and supporting people • Influencing others • Using relationships and networks • Focusing on achievement • Making judgements • Learning from mistakes • Having a strategic perspective • Having ethical competence
SKILLS FOR EMPLOYMENT	• Adaptability (Flexibility) • Taking opportunities • Independent decision-making (Initiative) • Creativity • Foreign languages • Critical ability (Reasoning; Analysis) • Self-confidence in uncertainty • Action and reflection (Doing/thinking) • Taking responsibility

CORE SKILL SETS	CORE SKILLS
KEY SKILLS	• Communication • Numeracy (Application of number) • Information technology/ processing • Working with others • Problem-solving • Improving learning and performance

1.1. Which of these sets of core skills is most relevant to your organisation?

(Weighting 0 to 5: 0 = not relevant at all, 5 = very relevant.)

CORE SKILL SETS	WEIGHTING
Key Skills	
Skills for employment	
Entrepreneurial and management skills	

1.2. What skills, if any, would you add to the list?

(Please remember that these are core skills. Any skills you add should be relevant to a very wide range of contexts.)

Key Skills	
Skills for employment	
Entrepreneurial and management skills	

1.3. Which government departments or agencies are responsible for policy in relation to these skills?

CORE SKILL SETS	DEPARTMENTS OR AGENCIES RESPONSIBLE
Key Skills	
Skills for employment	
Entrepreneurial and management skills	

1.4. What national programmes and schemes exist to support the development of these core skills, and where does the funding come from?

CORE SKILL SETS	PROGRAMMES AND SCHEMES	FUNDING
Key Skills		
Skills for employment		
Entrepreneurial and management skills		

1.5. What national arrangements are there to train teachers and trainers to deliver core skills?

SETS OF SKILLS	TEACHER/TRAINER TRAINING
Key Skills	
Skills for employment	
Entrepreneurial and management skills	

1.6. How is the quality of education and training in core skills monitored and evaluated?

SETS OF SKILLS	MONITORING AND EVALUATING QUALITY
Key Skills	
Skills for employment	
Entrepreneurial and management skills	

2. KEY SKILLS

These are the skills which help people to improve their learning and performance. They apply to a wide range of settings, mainly at work but also socially and in the community.

Part One: Key Skills in the education and training system

2.1. *At what stage are Key Skills included as a formal part of the education and training curriculum?*

(Weighting 0 to 5: 0 = not included at all, 5 = very important at this stage.)

STAGE	WEIGHTING
A Secondary education	
B Vocational education and training	
C Training in employment (continuous training)	
D Business and management training	

2.2. *How important are the Key Skills in relation to each other?*

(Weighting 0 to 5: 0 = not important at all, 5 = very important.)

KEY SKILL	WEIGHTING
Communication	
Numeracy (Application of number)	
Information technology (Information processing)	
Working with others	
Problem-solving	
Improving own learning and performance (Self-development)	

2.3. *How important are Key Skills in education and training?*

(Weighting 0 to 5: 0 = not important at all, 5 = very important.)

	WEIGHTING
Key Skills	

2.4. Are the Key Skills specified in detail, e.g. in standards or curriculum guidelines?

KEY SKILL	YES	NO
Communication		
Numeracy (Application of number)		
Information technology (Information processing)		
Working with others		
Problem-solving		
Improving own learning and performance (Self-development)		

If you answered Yes to any of the above, please list the titles of the documents which specify the Key Skills. If possible, send a copy of the documents with your completed questionnaire.

TITLE*	DOCUMENT INCLUDED	
	YES	NO

* *Please mark the documents: A*

Part Two: Learning and testing Key Skills

2.5. How are the Key Skills learned, at each of the stages listed in Question 2.1?

(Tick as many boxes as appropriate.)

TEACHING METHODS	STAGES			
	A	B	C	D
Classes/lessons on their own				
Classes/lessons, combined with other subjects				
Training events (e.g. workshops)				
Learning from experience				
Open and distance learning				

2.6. *How are the Key Skills tested, at each of these stages?*

(Tick as many boxes as appropriate.)

METHODS OF TESTING	STAGES			
	A	B	C	D
Formal written tests (examinations)				
Course work				
Special assignments and projects				
Assessment on the job				

Part Three: Policy

2.7. *What is the policy of your government for developing Key Skills?*

(Please describe the policy briefly. If possible, send a copy of relevant policy documents with your completed questionnaire.)

DESCRIPTION OF POLICY	
TITLE(S) OF DOCUMENT(S)*	

Please mark the documents: B

2.8. *What have been the main developments in Key Skills in the last two to three years?*

(Please describe them briefly. If there are any papers or articles which describe these developments in more detail, please send copies with your completed questionnaire.)

DESCRIPTION OF MAIN DEVELOPMENTS	
TITLE(S) OF PAPER(S) AND ARTICLE(S)*	

* ***Please mark the papers and articles: C***

2.9. *What are the main types of education or training institutions in which Key Skills are developed, at each of the four stages?*

(Please list only the main types.)

STAGES	TYPES OF INSTITUTION
A	
B	
C	
D	

Part Four: Good practice in Key Skills

2.10. *Choose two examples of good practice in developing Key Skills. Describe them below.*

Example 1

Name of institution								
Location	Town/City				Region			
Stage (tick one)	A		B		C		D	
Description of good practice								
Comments – what makes it good?								

Example 2

Name of institution								
Location	Town/City				Region			
Stage (tick one)	A		B		C		D	
Description of good practice								
Comments – what makes it good?								

3. SKILLS FOR EMPLOYMENT

These are the skills which employers want and which people find useful in employment. They provide access to jobs. They also help people develop in their jobs and progress their careers.

Part One: Employment Skills in the education and training system

3.1. At what stage are skills for employment included as a part of the education and training curriculum?

(Weighting 0 to 5: 0 = not included at all, 5 = very important at this stage.)

STAGE	WEIGHTING
A Secondary education	
B Vocational education and training	
C Training in employment (continuous training)	
D Business and management training	

3.2. How important are skills for employment in relation to each other?

(Weighting 0 to 5: 0 = not important at all, 5 = very important.)

SKILL	WEIGHTING
Adaptability (Flexibility)	
Taking opportunities	
Independent decision-making (Initiative)	
Creativity	
Foreign languages	
Critical ability (Reasoning; Analytical thinking)	
Self-confidence in uncertainty	
Action and reflection (Doing and thinking)	
Taking responsibility	

3.3. *How important are skills for employment in education and training?*

(Weighting 0 to 5: 0 = not important at all, 5 = very important.)

	WEIGHTING
Employment skills	

3.4. *Are skills for employment specified in detail, e.g. in standards or curriculum guidelines?*

SKILL	YES	NO
Adaptability (Flexibility)		
Taking opportunities		
Independent decision-making (Initiative)		
Creativity		
Foreign languages		
Critical ability (Reasoning; Analytical thinking)		
Self-confidence in uncertainty		
Action and reflection (Doing and thinking)		
Taking responsibility		

If you answered Yes to any of the above, please list the titles of the documents which specify the skills. If possible, send a copy of the documents with your completed questionnaire.

TITLE*	DOCUMENT INCLUDED	
	YES	NO

* *Please mark the documents: D*

Part Two: Learning and testing employment skills

3.5. How are skills for employment learned, at each of the stages listed in Question 3.1?

(Tick as many boxes as appropriate.)

LEARNING METHODS	STAGES			
	A	B	C	D
Classes/lessons on their own				
Classes/lessons, combined with other subjects				
Training events (e.g. workshops)				
Learning from experience				
Open and distance learning				

3.6. How are skills for employment tested, at each of these stages?

(Tick as many boxes as appropriate.)

METHODS OF TESTING	STAGES			
	A	B	C	D
Formal written tests (examinations)				
Course work				
Special assignments and projects				
Assessment on the job				

Part Three: Policy

3.7. What is the policy of your government for developing skills for employment?

(Please describe the policy briefly. If possible, send a copy of relevant policy documents with your completed questionnaire.)

DESCRIPTION OF POLICY	
TITLE(S) OF DOCUMENT(S)*	

* *Please mark the documents: E*

3.8. What have been the main developments in these skills in the last two to three years?

(Please describe them briefly. If there are any papers or articles which describe these developments in more detail, please send copies with your completed questionnaire.)

DESCRIPTION OF MAIN DEVELOPMENTS	
TITLE(S) OF PAPER(S) AND ARTICLE(S)*	

* *Please mark the papers and articles: F*

3.9. What are the main types of education or training institutions in which skills for employment are developed, at each of the four stages?

(Please list only the main types.)

STAGES	TYPES OF INSTITUTION
A	
B	
C	
D	

Part Four: Good practice in skills for employment

3.10. Choose two examples of good practice in developing skills for employment. Describe them below.

Example 1

Name of institution								
Location	Town/City				Region			
Stage (tick one)	A		B		C		D	
Description of good practice								
Comments - what makes it good?								

Example 2

Name of institution								
Location	Town/City				Region			
Stage (tick one)	A		B		C		D	
Description of good practice								
Comments - what makes it good?								

4. ENTREPRENEURIAL AND MANAGEMENT SKILLS

These are the essential skills for setting up and managing businesses. They help people find opportunities to start their own business and improve the performance of businesses. They also enable people to manage themselves and others effectively.

Part One: Entrepreneurial and management skills in the education and training system

4.1. At what stage are entrepreneurial and management skills included as a formal part of the education and training curriculum?

(Weighting 0 to 5: 0 = not included at all, 5 = very important at this stage.)

STAGE	WEIGHTING
A Secondary education	
B Vocational education and training	
C Training in employment (continuous training)	
D Business and management training	

4.2. How important are entrepreneurial and management skills in relation to each other?

(Weighting 0 to 5: 0 = not important at all, 5 = very important.)

SKILLS	WEIGHTING
Leading	
Motivating and supporting people	
Influencing others	
Using relationships and networks	
Focusing on achievement	
Making judgements	
Learning from mistakes	
Having a strategic perspective	
Having ethical competence	

4.3. *How important are entrepreneurial and management skills in education and training?*

(Weighting 0 to 5: 0 = not important at all, 5 = very important.)

	WEIGHTING
Entrepreneurial skills	

4.4. *Are entrepreneurial and management skills specified in detail, e.g. in standards or curriculum guidelines?*

SKILLS	YES	NO
Leading		
Motivating and supporting people		
Influencing others		
Using relationships and networks		
Focusing on achievement		
Making judgements		
Learning from mistakes		
Having a strategic perspective		
Having ethical competence		

If you answered Yes to any of the above, please list the titles of the documents which specify the skills. If possible, send a copy of the documents with your completed questionnaire.

TITLE*	DOCUMENT INCLUDED	
	YES	NO

* *Please mark the documents: G*

Part Two: Learning and testing entrepreneurial and management skills

4.5. How are entrepreneurial and management skills learned, at each of the stages listed in Question 4.1?

(Tick as many boxes as appropriate.)

LEARNING METHODS	STAGES			
	A	B	C	D
Classes/lessons on their own				
Classes/lessons, combined with other subjects				
Training events (e.g. workshops)				
Learning from experience				
Open and distance learning				

4.6. How are entrepreneurial and management skills tested, at each of these stages?

(Tick as many boxes as appropriate.)

METHODS OF TESTING	STAGES			
	A	B	C	D
Formal written tests (examinations)				
Course work				
Special assignments and projects				
Assessment on the job				

Part Three: Policy

4.7. What is the policy of your government for developing entrepreneurial and management skills?

(Please describe the policy briefly. If possible, send a copy of relevant policy documents with your completed questionnaire.)

DESCRIPTION OF POLICY	
TITLE(S) OF DOCUMENT(S)*	

* *Please mark the documents: H*

4.8. What have been the main developments in these skills in the last two to three years?

(Please describe them briefly. If there are any papers or articles which describe these developments in more detail, please send copies with your completed questionnaire.)

DESCRIPTION OF MAIN DEVELOPMENTS	
TITLE(S) OF PAPER(S) AND ARTICLE(S)*	

* *Please mark the papers and articles: I*

4.9. What are the main types of education or training institutions in which entrepreneurial and management skills are developed, at each of the four stages?

(Please list only the main *types.)*

STAGES	TYPES OF INSTITUTION
A	
B	
C	
D	

Part Four: Good practice in entrepreneurial and management skills

4.10. Choose two examples of good practice in developing entrepreneurial and management skills. Describe them below.

Example 1

Name of institution								
Location	Town/City				Region			
Stage (tick one)	A		B		C		D	
Description of good practice								
Comments – what makes it good?								

Example 2

Name of institution								
Location	Town/City				Region			
Stage (tick one)	A		B		C		D	
Description of good practice								
Comments – what makes it good?								

ANNEX 2 - EXAMPLES OF DEVELOPMENTS IN EU COUNTRIES

United Kingdom

Newbury College is one of around 450 further education colleges in the UK. This example focuses on how the college delivers key skills to learners on vocational courses. The college has a 'cross-college' delivery and assessment policy to ensure high quality, consistent and explicit delivery of key skills by specialist staff drawn either from the vocational areas or from the college's learning support unit. The aim is to standardise levels across all vocational areas. Key skills are delivered in dedicated workshops and courses are top-sliced by three hours per week to allow students time for key skills in their timetables. All teaching is contextualised to the vocational area and assessment is embedded via unit assignments.

The college is able to assess the value added by key skills delivery and assessment programmes. All students complete a basic skills screening on entry. Those who had previously attended vocational courses with explicit key skills teaching showed significant improvement in English and Maths scores. The college has noted a significant reduction of students needing to attend learning support workshops as a result of their supportive key skills policy.

Swansea College is another further education college, in Wales. This example focuses on the way in which key skills are written into students' assignment programme in an integrated manner. Key skills staff attend assignment development days with the vocational course team and are able to include relevant and appropriate tasks as a result. One member of staff is allocated for each programme area for each of the key skills. This means that at all levels there would be an input from a communication specialist, a numeracy specialist and an IT specialist (called 'link lecturers'). Communication and numeracy have one timetabled period each week with an additional learning support period allocated and staffed by specialists. IT has a double period allocated each week. All these skills have the additional backing of workshop facilities which provide reinforcement.

The link lecturer scheme allows a close and meaningful relationship between key skills and the vocational area in terms of integration. Key skills staff become specialists in the vocational area as well as the key skills area. Generous IT delivery ensures the development of computer literacy that allows use of IT skills in the assignment programme from a relatively early date. The learning support period ensures that those students who need additional support receive it as a part of the normal timetable and are not singled out. Drop-in workshop facilities act as an additional opportunity for help and practice, backing up the established system.

Swindon LEA is a local education authority, one of the departments of local government. The LEA has created a regional partnership between schools and companies to support the delivery of key skills. Four companies (Rover, WH Smith, Allied Dunbar, Burmah Castrol) and four secondary schools have worked together to plan, deliver and evaluate key skills programmes which focus on communication, problem solving, working with others and managing own learning.

All the programmes were jointly delivered by teachers and business trainers with the active participation of business representatives. All the programmes took place on company premises. Where appropriate, teachers assessed students and collected evidence. All the programmes had a common format and students worked in teams. Students worked in teams with people they did not know before the programmes started. Adults (other than teachers) acted as process observers. Wherever possible, business contexts were used. The programmes included a significant element of experiential learning.

Germany

The starting point for the project 'Lernen, Denken, Handeln'of the University of Göttingen was a regional model/pilot scheme that focused on the foundation year of commercial education within school-based vocational education. The core of the innovative approach was to transform traditional content units of curriculum to activity-based complex teaching and learning arrangements. The transformation was launched by using business simulation games (jeans factories in limited markets) as a narrative framework for business administration and accounting. Basic concepts were introduced via this kind of activity-based instruction. The transformation was extended to other parts of the curriculum by linking case studies or other exercises to the same narrative framework (commercial activities and managerial decisions of the jeans factories).

The approach was not based on particular content created for that purpose. Instead, the main thrust was to convert the learning situations into self-organised and group-based processes in which the students work as management teams and relate the concepts of business administration and accounting to the strategic decisions of companies. The basis for promoting key qualifications was provided by reflective group discussions linked to different cycles of the simulation and to managerial decisions which had to be explained. The project also made transparent this kind of progress in reflective learning.

The project first developed an alternative implementation of existing curricula. Only at a later phase did it make recommendations for curriculum revision. It is also worth noting that the approach was not limited to one particular context (school-based provision for the foundation year). The ambition of the project was to continue the work to cover the whole range of vocational curriculum, including school-based and workplace-based elements.

The starting point of the model/pilot scheme Schwarze Pumpe (promotion of key qualifications with the help of integrative working and learning assignments) was to develop a curriculum that would provide a regulated skilled worker's qualification (Berufsausbildung) and entrance qualification to higher education (Fachhochschulreife) with a need to take an additional preparatory scheme (Fachoberschule). The basic assumption of the scheme was that the necessary integration of academic and vocational qualifications, i.e. preparing for studies and preparing for skilled workers' occupational tasks, could be combined in integrative designs within the curriculum. These integrative designs were aimed to integrate both school-based and workplace-based elements of the curriculum and to use the latter ones as an activity-based frame of reference for the subject-based knowledge inputs.

A particular example of such working and learning assignments are the self-organised projects of trainees to construct demonstration models that illustrate the processes of compressing brown-coal into bricks. In these projects groups of trainees are expected to make their own plans concerning the choices of materials, the construction of different parts of the machines and the interfaces between metal-working and electric designs. In such integrative assignments the work-related qualification goals are built in the major project goal (to construct a miniature demonstration of a production phase) and the subject-related qualification goals are built in as goal-settings for the supporting knowledge acquisition.

The main aim of the scheme was to develop a curricular concept that combines the skilled worker's qualifications, certified by the chambers of industry and commerce, and the entrance qualification for vocational higher education regulated by educational legislation. Within this model the integrative working and learning assignments had a central role of shifting the emphasis from an additive enrichment (vocational learning + academic learning) towards an integrative enrichment (subject-based learning inputs as support for work-related assignments).

The promotion of key qualifications was not defined as a specific element of curriculum but an in-built aspect in the assignments. Thus, key qualifications were promoted by the dynamics of self-organised and reflective project work, which link the knowledge-inputs into plans that are related to the project-goals and require joint decisions how to apply the plans as well as joint assessment of the outcomes.

The regional model/pilot scheme GOLO (Gestaltungsorientierte Berufsausbildung im Lernortverbund) was launched to combine the efforts of small and medium enterprises via consortium-based training in a particular region (Wilhelmshaven). The aim was to guarantee a satisfactory supply of training opportunities by joining forces of small and medium-sized enterprises (SMEs) and at the same time to support a qualitative development in linking the training function to the production processes. This new quality is emphasised with the notion of 'Gestaltung' (social shaping).

The scheme was based on a consortium that brought together all the regional enterprises that provided training opportunities in the fields of metal and electric occupations. The coordinating function was given to the vocational school whereas the regional association for business and industry (Wirtschaftsverband) acted as a facilitator. With two field-specific teams and with a joint co-ordination team the consortium tried to develop a closer collaboration between different enterprises. The main thrust of the scheme was to develop existing or potential production-related 'interface areas' into major contexts of training activities and to support production-related co-operation. As curricular vehicles the scheme used integrative working and learning assignments. Gradually this kind of co-operation led to other enterprises that had not previously provided training opportunities joining the consortium.

Concluding remarks

It is obvious that the two sets of examples can not provide a complete picture of all relevant developments in the EU countries. Instead, they have been chosen from countries that are considered to represent opposites in the development of national VET systems and thus relate to the two poles within the key qualification debates (see section 2.4.).

However, given the fundamental differences, it is striking that the innovative approaches in creating new pedagogic and curricular and curricular design or redesign have several similarities. For countries that are looking for new solutions, without having exactly the same starting points, there is a possibility of analysing what can be learned from different cultures without merely copying them.

It is also worth noting that the presentation of the examples is based on different kinds of sources, which represent different patterns of reporting on good practice. The UK examples were selected from a quick survey based on reports given by schools, colleges and LEAs themselves. The reflection on interesting features or on criteria for good practice were entirely based on VET providers' self-assessment. The examples from Germany were based on model/pilot schemes that have had federal funding and have been documented and analysed by accompanying research projects. The differences in reporting relate to another cultural difference, national funding of innovative practices and the availability of 'change agents'. In the case of United Kingdom the scope of innovative activities has been that of local and regional modifications within implementation of pre-given models. In such circumstances the change agents are to be found among the local teachers and trainers. The German examples represent another pattern for mobilising resources to support local and/or regional innovations. The underlying assumption is that decentralised initiatives can be analysed as pilot cases for a general revision of the policy model or curricular framework. An additional set of change agents is provided by the double function of the accompanying research, which helps to bring the local/regional innovations into concept and to evaluate the preconditions for and limits to successful implementation.

The two sets of examples were chosen from countries in which the issues of key skills or key qualifications are keenly related to the development of the frameworks for initial VET systems. In several other countries the debates on key and core competencies are not that closely related to such frameworks. Several EU countries can present similar examples in the domain of continuing vocational training. As a corollary to this, some countries have developed assessment tools to support the mobilisation of young and adult learners for a 'second chance' and for lifelong learning. Other countries have put a greater emphasis on policy measures to facilitate regional partnerships between training providers and enterprises.

For example, in France and Italy there are several initiatives to develop diagnostic tools to assess the learning potentials of young and adult learners that have opted out of the educational mainstream provision. These diagnostic tools are linked to the development of career guidance and counselling services and their respective instruments. In Denmark and France there are several examples of regional partnerships in which public (or semi-public) training provisions are used as backbones for company-adjusted training and development projects. Such co-operation arrangements have become a systemic guideline for developing particular sub-systems in continuing vocational training. In the Netherlands the development of the framework of national qualifications and the parallel process of making innovation plans for regional colleges are aimed to provide the frameworks and the organisational preconditions for developing local and regional training and development partnerships.